

In the claims:

1. (currently amended). A method of treating a ~~natural~~ soft skeletal tissue injury in a patient the method comprising administering to the patient a composition of mesenchymal stem cells in a liquid suspension of bone marrow supernatant ~~enriched compared to the natural source of said cells~~, or mesenchymal stem cells and tenocytes derived therefrom in a liquid suspension of bone marrow supernatant.
2. (currently amended). The A method according to claim 1 wherein the soft skeletal tissue injury is strain induced.
3. (currently amended). The A method according to claim 1 wherein the composition of mesenchymal stem cells or tenocytes is administered at the site of tissue injury.
4. (currently amended). The A method according to claim 1 wherein the soft skeletal tissue is a tendon or ligament.
5. (currently amended). The A method according to claim 1 wherein the patient is a mammal.
6. (currently amended). The A method according to claim 5 wherein the mammal is a human or a non-human mammal ~~of economic importance~~.
7. (currently amended). The A method according to claim 6 wherein the non-human mammal is selected from the group consisting of horses, dogs and camels.
8. (currently amended). The A method according to claim 1 wherein the patient is a horse.
9. (currently amended). The A method according to claim 1 wherein the patient is a horse or a camel and the soft skeletal tissue is selected from the group consisting of

superficial digital flexor tendon (SDFT), suspensory ligament, deep digital flexor tendon, meniscus, cruciate ligament, and accessory ligament of the deep digital flexor tendon.

10. (currently amended). The A method according to claim 1 wherein the patient is a dog and the soft skeletal tissue is selected from the group consisting of Achilles tendon, cruciate ligament, meniscus, flexor tendon and intervertebral disc.

11. (currently amended). The A method according to claim 1 wherein the patient is a human and the soft skeletal tissue is selected from the group consisting of Achilles tendon, quadriceps tendon, rotator cuff, medial and lateral epicondylitis, cruciate ligament, meniscus and intervertebral disc.

12. (currently amended). The A method according to claim 1 wherein the mesenchymal stem cells or tenocytes are allogenic.

13. (currently amended). The A method according to claim 12 wherein the mesenchymal stem cells or tenocytes are autologous.

14. (currently amended). The A method according to claim 13 wherein the mesenchymal stem cells are derived from the bone marrow of the patient.

15. (currently amended). The A method according to claim 13 wherein the mesenchymal stem cells are derived from umbilical cord blood previously recovered from the patient.

16. (currently amended). The A method according to claim 1 wherein the liquid suspension of mesenchymal stem cells or tenocytes is injected.

17. (currently amended). The A method according to claim 1 wherein ~~biological signals which encourage~~ the composition further comprises one or more growth factors, differentiation factors or regeneration factors to encourage differentiation of the mesenchymal stem cells ~~to form into~~ tenocytes and discourage differentiation of the

mesenchymal stem cells into bone tissue ~~are also administered to the patient.~~

18. (canceled)

19. (currently amended). A kit ~~of parts~~ comprising (1) a composition of mesenchymal stem cells in liquid suspension of bone marrow supernatant ~~enriched compared to the natural source of said cells,~~ or tenocytes derived therefrom, (2) means for delivering the liquid suspension of stem cells to a site of ~~natural~~ soft skeletal tissue injury in a patient and (3) means for determining that the means for delivering locate to the site of injury.

20. (currently amended). The ~~A~~ method according to claim 1 wherein the site of injury is cleansed of damaged tissue and any early repair scar tissue starting to form at the site before administration of the composition of mesenchymal stem cells or tenocytes.

21. (new). The method according to claim 1 wherein the composition comprises at least 10 % mesenchymal stem cells, or at least 50% mesenchymal stem cells, or at least 60% mesenchymal stem cells, or at least 70% mesenchymal stem cells, or at least 90 % mesenchymal stem cells, or at least 95% mesenchymal stem cells, or at least 99% mesenchymal stem cells.

22. (new). The method according to claim 1 wherein the soft skeletal tissue injury comprises a cavity, or a lesion that can be closed to form a cavity, for retaining the composition.

23. (new). The method according to claim 1 wherein the composition comprises a gelling agent.

24. (new). A composition of mesenchymal stem cells or mesenchymal stem cells and tenocytes derived therefrom in a liquid suspension of bone marrow supernatant, wherein the composition of mesenchymal stem cells is enriched compared to a natural source the mesenchymal stem cells.

25. (new). The composition of claim 24 wherein the mesenchymal stem cells are enriched at least 2-fold compared to the natural source from which the mesenchymal stem cells are isolated.

26. (new). The composition of claim 24 wherein the mesenchymal stem cells are enriched at least 3-fold, 4-fold, 5-fold, 10-fold, 20-fold, or at least 30 or 40 or 50 or 100-fold, or at least 1000-fold or 10^4 -fold, or 10^5 -fold compared to the natural source from which the mesenchymal stem cells are isolated.

27. (new). The composition according to claim 24, wherein the composition comprises at least 10 % mesenchymal stem cells, or at least 50% mesenchymal stem cells, or at least 60% mesenchymal stem cells, or at least 70% mesenchymal stem cells, or at least 90 % mesenchymal stem cells, or at least 95% mesenchymal stem cells, or at least 99% mesenchymal stem cells.

28. (new). The composition according to claim 24, wherein the liquid suspension comprises a gelling agent.

29. (new). The composition according to claim 24, wherein the composition further comprises biological signals that promote differentiation of the mesenchymal stem cells into cell types that regenerate soft skeletal tissue injuries and discourage differentiation of the mesenchymal stem cells into cell types that do not regenerate soft skeletal tissue injuries.

30. (new). The composition according to claim 24, wherein the biological signals comprise one or more growth factors, differentiation factors or regeneration factors.

31. (new). The composition according to claim 24, wherein the one or more growth factors, differentiation factors or regeneration factors comprise TGF beta, IGF 1, IGF 2, PDGF, FGF, or COMP.

32. (new). The composition according to claim 24, wherein the mesenchymal stem cells and/or tenocytes are allogenic or autologous.

33. (new). The composition according to claim 24, wherein the mesenchymal stem cells are derived from either: i) bone marrow of a patient to be treated; or ii) previously recovered umbilical cord blood of a patient to be treated.

34. (new). A method of treating a soft skeletal tissue injury in a patient comprising administering to the patient a composition of claim 24, wherein the composition is administered to the soft skeletal tissue injury in the patient.

35. (new). The method of claim 34, wherein the soft skeletal tissue injury is to a tendon, ligament, intervertebral disc, or meniscus.

36. (new). The method of claim 34, wherein the soft skeletal tissue injury is percutaneous or subcutaneous.

37. (new). The method of claim 34, wherein the soft skeletal tissue injury is an injury to a soft skeletal tissue selected from the group consisting of superficial digital flexor tendon (SDFT), suspensory ligament, deep digital flexor tendon, meniscus, cruciate ligament, and accessory ligament of the deep digital flexor tendon.

38. (new). The method of claim 34, wherein the soft skeletal tissue injury is a natural subcutaneous strain induced injury in a tendon or ligament selected from the group consisting of superficial digital flexor tendon (SDFT), suspensory ligament, deep flexor tendon, deep digital flexor tendon (DDFT), accessory ligament of the deep digital flexor tendon, cruciate ligament, Achilles tendon, flexor tendon, quadriceps tendon, rotator cuff, and lateral or medial epicondylitis.

39. (new). The method according to claim 34, wherein the composition comprises at least 10 % mesenchymal stem cells, or at least 50% mesenchymal stem cells, or at least 60% mesenchymal stem cells, or at least 70% mesenchymal stem cells, or at least 90 % mesenchymal stem cells, or at least 95% mesenchymal stem cells, or at least 99% mesenchymal stem cells.

40. (new). The method according to claim 34, wherein the patient is a human.